US Army Corps of Engineers®
Engineer Research and Development Center

Terrain Database Generation, Archive, and Support

Technology

The Topographic Engineering Center (TEC) routinely develops Modeling and Simulation Terrain Databases and makes them available to the Department of Defense (DOD) community via the Master Environmental Library (MEL) web site. Various formats and resolutions are available on unclassified and classified sites to promote reuse and to minimize duplication of effort.

Terrain Database formats include:
- Compact Terrain Database (CTDB) for Joint Semi-Automated Forces (JSAF) and OneSAF TestBed (OTB)
- SEDRIS Transmittal Format (STF) for interoperability
- OpenFlight and OpenScene for 3-D visualization
- Dynamic Terrain Database (DTDB) for dynamic terrain.

Geographic extents include worldwide coverage at very low resolution, substantial coverage at low resolution, and limited coverage of medium- and high-resolution databases.
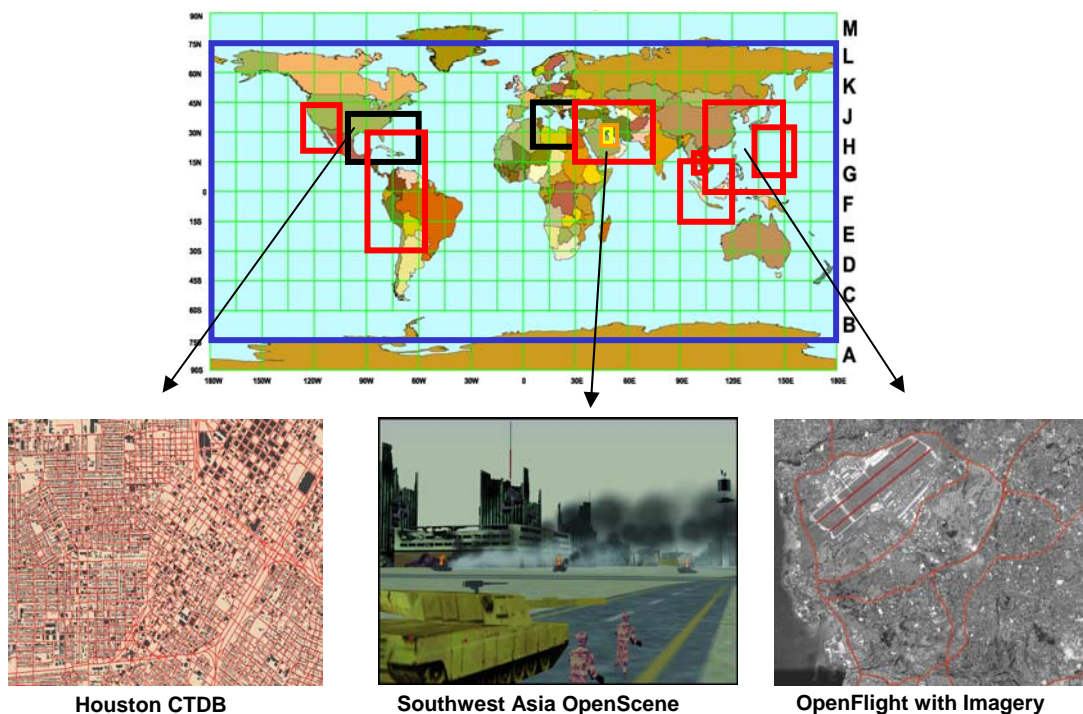
Problem Expected Cost

Until now, no central repository for Modeling and Simulation Terrain Databases has existed. Users have been (and still are) rebuilding databases that already exist. This data reconstruction can cost the military from thousands to millions of dollars per year.

Expected Cost To Implement

The Modeling and Simulation Terrain Databases described here are available free of charge to DOD users and DOD contractors with Internet access through a supported web browser, i.e., (minimally) Netscape ver. 4.x or Internet Explorer ver. 4.x.

Multi-Resolution Terrain Databases

Houston CTDB

Southwest Asia OpenScene

OpenFlight with Imagery

Benefits/Savings   DOD users can fulfill their terrain database requirements without incurring the costs (time and money) of developing databases that already exist.

ERDC POC   For more information about terrain database generation, archiving, and support, contact Ms. Nancy Gardner (Nancy.K.Gardner@erdc.usace.army.mil) at (703) 428-3709 or visit:

http://www.tec.army.mil/research/products/Modeling_Simulation/TDB.html

Distribution Sources   The unclassified MEL web site is available through:

http://mel.dmso.mil/mel-bin/html_query

TEC will develop new terrain bases for customers for a fee. Military customers can provide TEC with either Reimbursable or Direct Cite dollars for these services. Customers should contact the listed ERDC POC for more information on new terrain database development.

Available Documentation   Online User Guides and Technical reference material are available through the MEL web site at:

http://mel.dmso.mil/about_mel/user_pubs.jsp

Two software user manuals (*OpenScene Modstealth*, and *Dynamic Terrain Simulator*) are available at no cost. Customers should contact the listed ERDC POC to obtain these materials.

Available Training   Online tutorials are being developed for the MEL. All tutorials require Netscape 4.x or Internet Explorer 4.x browsers. JavaScript and Style Sheets must also be turned on. Currently, tutorials for the HTML Data Query and Query Results are available at:

http://mel.dmso.mil/tour/tour.html

No formal training is currently available for terrain database development. Interested military customers should contact the listed ERDC POC to request that TEC develop a training class for limited groups of persons on a fee-for-service basis.

Available Support   Online support is available through the MEL web site help, software tutorials, site-wide text search, and direct (e-mail) contact with technicians, which can be accessed through:

http://mel.dmso.mil/sitemap/sitemap.html